

National Strategy Framework of Nutrition Interventions in Yemen 2022–2030



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Foreword

For more than a decade, Yemen has positioned nutrition highly on its development and humanitarian agenda with a strong political commitment. This was translated into governance document development and endorsement including Yemen Nutrition Strategy for 2011-2020, Resolutions, Protocols and Multisectoral action plans to always promote and ensure access to nutrition security for all people in Yemen, particularly the most vulnerable and in line with our core values and guiding principles.

Yemen have been facing dire challenges for acute malnutrition, stunting and micronutrient deficiencies with suboptimal feeding practice for less than two years exacerbated by political unrest, food insecurity, disease and widespread deepening poverty. These challenges certainly are beyond the capacity of a single sector or agency to address, hence requires multi-sectoral interventions.

Nutrition is solidly ingrained in the Sustainable Development Goals through Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture) and its targets 2.1 and 2.2.1. There is also a clear recognition that nutrition contributes to nearly all the other SDGs, in particular SDG3 (Ensure healthy lives and promote well-being for all at all ages) target 3.4.2.

At global level, there is a strong commitment for nutrition. Among other movements and initiatives, the United Nations Member States have declared 2016-2025 to be the UN Decade of Action on Nutrition to increase investment in nutrition. The World Health Organization has been mandated by the UN General Assembly (Resolution A/RES/259) to lead the implementation of the Nutrition Decade, jointly with the Food and Agriculture Organization and in collaboration with the World Food Programme, the International Fund for Agricultural Development, and United Nation Children's Fund to accelerate the implementation of commitments made at the Second International Conference of Nutrition (ICN2, 2014), towards achieving the six Global Nutrition Targets and the diet-related noncommunicable diseases targets by 2025 and contribute to attaining the SDGs by 2030.

With the momentum of this promising era, a vision to assure good nutrition status for all Yemenis in the eight coming years, and an assigned mission to strengthen nutrition actions to assure accessibility to good nutrition and enhance nutrition care contributing to improving community's health, the Government of Yemen MoPHP has developed a National Strategy Framework of Nutrition Intervention (NSFoNI) 2022-2030, which includes an agreed set of

strategic priorities areas and results to achieve. The main objective of the strategy is to enhance universal access to nutrition services and ensure the sustainability of interventions to reduce morbidity and mortality among community members. This objective is in line with the paradigm shift in Yemen through the implementation of the Triple Nexus of Humanitarian, Development, and Peace a pathway for the country toward its development.

The National Nutrition Strategy is meant to address all forms of malnutrition challenges including achieving, by 2030, the agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons in a multi- sectoral approach requiring the engagement of stakeholders from the community to the national level, with the support of the public sector (Line Ministries, and local Government Authorities); higher learning and training institutions, professional bodies, private sector, development partners, civil society, the media and the community at large.

The strategy provides the clarity and framework needed to ensure the support, buy-in and alignment on nutrition in Yemen. It will encourage all stakeholders to focus on what shall be done to ensure access by all people, in particular people in vulnerable situations, to sustain and safe, nutrition care all year round.

With a strong political will for addressing issues of nutrition security the Government of Yemen shall assume primary responsibility for resource mobilization to deliver actions to reach the targets set while development partners will complement Government efforts. The Ministry of Public Health and Population shall spearhead the implementation of the strategy with SUN-Yemen having the multisectoral coordination role.

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List of Acronyms

AARR: average annual reduction rate

ANC: Antenatal Care

CMAM: Community Management of Acute Malnutrition

C4Ds: Communication for Development

CHNVs: Community Health and Nutrition Volunteers

CHNWs: Community Health and Nutrition Workers

COVID-19: Coronavirus disease

DHS: Demographic Health Survey

EFSNA: Emergency Food Security and Nutrition Assessment

EMRO: Regional Office for the Eastern Mediterranean

FAO: Food and Agriculture Organization of the United Nations

FSAC: Food Security and Agriculture Cluster

GEWE: Gender Equality and Women's Empowerment

GHO: Governorate Health Offices

HeRAMS: Health Resources and Services Availability Monitoring System

HNO: Humanitarian Needs Overview

HRP: Humanitarian Response Plan

IDD: Iodine deficiency disorder

IFRR: integrated programming for famine risk reduction

IPC: Integrated Phase Classification for Food Insecurity

IYCF: Infant and Young Child Feeding

LA: Landscape analysis

LBW: Low birth weight

MoPHP: Ministry of Public health and Population

MoPIC: Ministry of Planning and International Cooperation

MSNAP: Multi-Sectoral Nutrition Action Plan

N4G: Nutrition for growth

NGOs: Non-Governmental Organization

NIS: Nutrition Information System

NSS: Nutrition Surveillance System

OTP: Outpatient Therapeutic Programme

RH: Reproductive Health

SAM: Severe Acute Malnutrition

SDGs: Sustainable Development Goals

SFP: Supplemental Feeding Program

SMART: Standardized Monitoring and Assessment of Relief and Transitions Methodology

SUN: Scaling Up Nutrition

TFC: Therapeutic feeding centers

TSFP: Targeted supplementary feeding programme

UN: United Nations

UNICEF: United Nations Children's Fund

UNSDCF: United Nations sustainable development goals cooperation framework

WASH: Water, Sanitation, and Hygiene

WFP: World Food Programme

WHA: World Health Assembly

WHO World Health Organization

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Executive Summary

Vision, Mission and Objective

The MoPHP in Yemen vision is to ensure good nutrition status for all Yemenis in 2030 through its mission of strengthening nutrition actions to assure accessibility to good nutrition and enhance nutrition care to improve community's health by 2030. To reach its vision and mission, the MoPHP define strategic priority areas in the National Strategy Framework of Nutrition Intervention. The goal of the strategy is to enhance universal access to nutrition services and ensure the sustainability of interventions to reduce morbidity and mortality among community members.

Targeted achievements

The country aims at achieving the global targets for exclusive breastfeeding and overweight, reduce stunting by 10 %, wasting below 10 %, and low birth weight below 16 %. 100 % of less than five years will be supplemented with vitamin A and all households will consume iodized salt.

Rational of the strategy

A National Nutrition Strategy covering 2011–2020 was developed and endorsed to strengthen nutrition actions in health system addressing all forms of malnutrition. The implementation faced challenges due to insufficient financial sources, conflict and political instability disrupting health and nutrition services. Since more than a decade around, in Yemen nutrition actions have been focused on tackling acute malnutrition with little action for other types of malnutrition. Global commitments for nutrition have been expressed in initiatives and movements such as the Decade of Action on Nutrition (2016-2025) to address malnutrition in all its forms. The WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition defines the Global nutrition targets for 2025 and was endorsed by the World Health Assembly (Resolution 65.6, 2012). The targets were integrated into the 2030 Agenda for sustainable development goals. In 2021, the Food systems and Nutrition for growth summits permitted countries to state their commitments to assure population food and nutrition security. In line with these global actions and recommendations, considering COVID -19 pandemic impact on malnutrition and for translating their commitments into actions countries redefine their strategic orientations for nutrition to reverse COVID-19 impact and further position nutrition as an essential development priority. With the focus on acute malnutrition, the high rates of other forms of malnutrition, very limited implementation of 2011 to 2020 strategy and the changes in health and food security situation, Yemen redefines its strategic priorities for nutrition, to

harness humanitarian nutrition actions to development interventions to enable the country to adjust to its evolving needs toward reaching its aim to reduce population morbidity and mortality as well as assuring the economic and social development of the country. The strategic priority areas were defined based Government of Yemen priorities and on evidence generated by the WHO supported Yemen readiness assessment to accelerate nutrition action in 2021.

The Socio-Economic Context on Yemen

Economic, Nutrition and Food security, and Health situation in Yemen

More than half of the population live below the poverty line with no access to basic essential services, including water and health. Poverty, conflict, and the political instability resulted in the destruction of most of public infrastructure and economic collapse.

Malnutrition in Yemen was already of public health or emergency concern before 2015 start of the conflict. The Demographic Health Survey (DHS) in 2013, revealed very high rate of undernutrition with stunting in under five years' children at 46.6%, 16,4% of acute malnutrition, low birth rate at 23%, and anemia affecting more than 70 % of women of reproductive age with overweight at 24%. Yemen faces food insecurity emergency. According to the Integrated Food Security Phase Classification (IPC 2022) 54 % of the total population are in food insecurity, with 17.4 million in crisis (IPC Phase 3). Of greatest concern is the 31,000 people facing extreme hunger levels (IPC Phase 5 Catastrophe) during the current analysis of the IPC food insecurity, rising to 161,000 by June 2022.

Since more a decade around, more than 5,000 public health facilities were severely shortstaffed. Based on Health Resources and Services Availability Monitoring System (HeRAMS) 2018, almost 50% of health facilities are not functional, and those functioning lack human resource, equipment, and essential medicines. This situation still prevails, since HeRAMS 2020 found that 49% of health facilities are non or partially functioning, and Yemen is facing severe shortage of human resource and inpatients beds. Disease burden is of concern with frequent outbreaks, and increasing cases of noncommunicable diseases (diabetes, cardiovascular disease, and cancers). Maternal mortality rate remains high, with 385 maternal deaths per 100,000 births, mortality rate among children under 5 years is 48 deaths per 1,000 live births, and infant mortality rate is 43.2 deaths per 1,000 live births. To reduce mortality Yemen, with the support of multiple donors and partners has enhanced humanitarian health actions following strategic objectives of the UN Humanitarian Response Plan (HRP) for the country. In the process of the nexus from Humanitarian to development, the United Nations country team developed the united nation sustainable development goal cooperation framework for Yemen covering the period of 2022

to 2024 with the goal of having transformative change in the quality of people life considering all aspects including among others food nutrition and health toward achieving all SDGs. To address all forms of malnutrition and accelerate nutrition action to improve population health this strategy was developed to complement and implement actions of 2011-2020 strategy.

Yemen readiness to accelerate nutrition action assessment

Methodology

The situation was assessed using a desk review of all national governance document on food and nutrition and key informant interview with national stakeholders (MoPHP, MoPIC, Ministry of Education (MoE), Ministry of Agriculture (MoA), Ministry of Industry (MoI) and Ministry of Water and Environment,) Donors, UN agencies and NGO.

Perception of stakeholders on nutrition action

The general perception of stakeholders for nutrition action in Yemen is a focus on wasting or nutritional oedema treatment. Other forms of malnutrition are seldom addressed. The concepts of "intervention packages" and of a "continuum of care" are not well understood by health staff and there are no or very few interventions regarding overweight and obesity, nutrition during illness, food safety, and adolescent nutrition.

Political commitment and Coordination

The Country commitment to act for nutrition is reasonably strong. Since 2003, many legislative decisions through resolutions or decrees were approved for food fortification, protection and promotion of breastfeeding, and guidance documents developed and endorsed. The latter includes the 2011-2020 Nutrition Strategy, the National Strategy for Social and Behavior Change (2018 to 2021), the Multi-Sectoral Nutrition Action Plan (MSNAP, 2020-2023), Yemen child wasting reduction plan (2021-2023), all aiming at reducing all forms of malnutrition. Programs are insufficiently implemented, the nexus from humanitarian to development is weak and the commitment is focused on acute malnutrition rather than to prevent or treat all forms of malnutrition. Coordination is mainly done by UN agency and weak for national institution.

Humanitarian intervention strategic document

The humanitarian response in Yemen is defined each year from key needs described in the Humanitarian Needs Overview (HNO) which is converted into strategic objectives and actions in the Humanitarian Response Plan implemented through inter-sectoral approach focusing on lifesaving interventions.

Human resources for nutrition

Only 8.6% of the respondents have a nutrition background. Nutrition activities in health facilities are implemented by nurses, midwives, medical assistants, or medical doctors, pharmacists and radiologists with insufficient knowledge and expertise. Pre-service training is few hours and outdated and very few universities have an academic nutrition program. Inservice training is focused on acute malnutrition and nutrition surveillance. There is a brain drain due to insufficient or lack of salaries.

Funding sources and orientations

Funding is mainly for humanitarian activities with resources allocated to life saving intervention for acute malnutrition. The domestic budget covers some operational cost, infrastructure, and staff cost.

Nutrition information system

Nutrition data, mainly on acute malnutrition are from various sources and each partner analyzes and disseminate his data. No regular national analytic report is issued by health authorities. The recently endorsed national framework on routine nutritional indicators in health sector was not yet being collected. National surveys are another source of information.

Strategic areas of the National Strategy Framework of Nutrition Intervention

The results and recommendations from the readiness assessment, enabled to define the strategic areas including: 1.Maintain a conducive environment through assuring the sustainability of the political commitment; 2. Ensure community engagement for increased awareness of nutrition and improved uptake of appropriate nutrition practices and behaviors; 3. Improve the multisectoral coordination and engagement involving all sectors and levels of government, as well as other stakeholders in prevention and management of malnutrition (specific and sensitive nutrition interventions); 4. Strengthen the access and provision of nutrition services to address all forms of malnutrition and scale up preventive services in the context of universal health coverage; 5. Support nutrition in emergencies, preparedness and response; 6. Support capacity building of institutions and health workers to improve the quality of nutrition services; 7. Enhance nutrition information systems, monitoring, and evaluation; to achieve the vision of the national nutrition strategy and ensure nutrition security.

Responsible Structure for Implementation and Funding Mechanisms

National Responsible structures for implementation

SUN-Yemen-Movement is the overarching coordination body following activities implementation and scale up in relevant sectors. Each relevant ministry or entity is responsible or contribute to providing nutrition activities needed in its sector. The Governorate Health Offices support the implementation in the field and coordinate all stakeholders at the decentralized level.

Funding mechanisms

Funding sources will be diversified with gradual increase of national investment to ensure the sustainability of nutrition interventions. The support of partners is to cover the gap. Funding sources could be state and local government budgets, legal financial supports, taxes allocate to nutrition. Nutrition and food safety plans are included in other sector than health budgets. Relevant programmes opportunities such as immunization, communicable and noncommunicable diseases, maternal and child health can be used to implement nutrition activities where resource is available.

Monitoring, Evaluation, Accountability and Learning

Monitoring and evaluation will be carried out using the monitoring matrix and evaluation criteria based on input, output, outcome, and impact indicators. The matrix is in line with the common results framework of the MSNAP to assess accessibility to nutrition care, service delivery quality and progress toward the agreed targets. Data will be disaggregated by geographical area, gender, and age. The midterm evaluation will support work plan adjustment and the final evaluation will identify opportunities to expand the project, challenges, strengths, constraints, and lessons learned.

Stakeholders Accountability to beneficiaries

The MoPHP will monitor how population benefit from the investment through tracking nutrition fund utilization. The accountability to beneficiaries will be assessed against Yemen commitments for food and nutrition under the summits and in line with to the strategy framework. The level of community engagement in assessment, decision making for problem identification and solving and activities implementation, the quality of the care, the population coverage will also be assessed. The results will be translated in usable insights information to drive better action and disseminated to stakeholders and donors.

Data Utilization and Knowledge building

An exchange platform for information dissemination and use by all stakeholders including civil society, international and national partners and to hold discussions on best practice, success stories as well as lessons learned to accelerate progress and for knowledge building will be established.

Equality in access to nutrition interventions, Guiding principles and Enablers

All people living in Yemen should have equal access to nutrition service. Leaders, women, youth, and family members are engaged in nutrition problem solving. The guiding principles are to increase communities' resilience to nutrition and food crisis leaving no one behind. Structural changes for strengthening multisectoral collaboration, peace process, national investment and dedicated national senior technical experts are enabling factors to sustain activities implementation in addition to partner's support. Empowering community in knowledge and decision making for fit to context sound solutions and their strong engagement will sustain behavior change to enhance their resilience.

Nutrition Strategy Vision

Good nutrition for all Yemenis

Nutrition Strategy Mission

We work to Strengthen nutrition actions to assure accessibility to good nutrition and enhance nutrition care contributing to improving community's health by 2030.

Values for the Implementation

As part of the overall Health National Strategy, Nutrition Strategy adopts the values of the National Health Strategy 2022-2025

- 1. Equality: Distribution of resources and provision of human rights- based nutrition services and ensuring that every individual can indiscriminately obtain them;
- 2. Quality: Constant quality improvement to ensure people's satisfaction of nutrition services;
- 3. Empowerment: Community to be actively involved in decision-taking and estimating the needs of nutrition services;
- 4. Efficiency: Financial efficiency through the optimal utilization of resources, costs containment and sustainability of nutrition funding;
- 5. Evidence-based decision taking and nutrition services provision;
- 6. Collaboration: Participation, cooperation and coordination between the sectors and emphasizing that the nutrition sustainable development goals cannot be realized with the sole efforts of the health sector but rather through the collaborated efforts of all relevant sectors including agriculture, education, industry, trade... and all development partners;
- 7. Advocacy and coordination: Prevalence of the one team spirit and open dialogue to transparently and objectively discuss nutrition issues; and interventions' outcomes; and
- 8. Accountability: Commitment to the goals of the national nutrition strategy and to regional and international obligations and protocols.

Objectives of the nutrition strategy

This strategy goal is to enhance universal access to nutrition services and ensure the sustainability of interventions to reduce morbidity and mortality among community members. To achieve the nutrition targets the following specific objectives aim at inducing of the strategic framework to accelerate efforts and improve nutrition through:

- 1. Maintaining the political commitment and assuring good nutrition practice throughout the life course, for the most vulnerable population;
- 2. Sustaining good feeding practice among care givers to control undernutrition in children less than 5 Years in addition to pregnant and lactating women
- 3. Integrating nutrition-related activities in all relevant government policies strategic documents; and plans;
- 4. Building the capacity of health care providers at all level of the national health system on nutrition specific interventions;
- 5. Enhancing the inter-sectoral coordination mechanisms through a common accountability framework for nutrition sensitive activities; Engaging communities in nutrition interventions through enhanced health education programs to reduce all forms of malnutrition
- 6. Strengthening nutrition interventions in emergency situations and applying the risk communication approach; and Enhancing nutrition knowledge and data management to inform the decision-making process and encourage the investment in health and nutrition interventions.

Expected targets

To assure progress toward achieving national, regional, and global nutrition targets, the Yemen strategy works towards achieving the following:

- reducing the number of children under 5 who are stunted by 10%;
- reducing childhood wasting to 10% or below;
- controlling the prevalence of overweight in general population especially among women from 15 to 49 years;
- reducing low birth weight to 16% or below;
- reducing anemia in women of reproductive age to 50%;
- improving exclusive breastfeeding in the first 6 months to not less than 50%; and

- increasing micronutrient supplementation including vitamin A and iodine, to 100%.

Table 1: Yemen Nutrition Targets for 2030

Nutrition Targets	Baseline	Target values
	values (2021)	(2030)
Number of children under 5 who are stunted by (%)	46.5%	36.5%
Prevalence of wasting and nutritional oedema (%)	16.4%	=<10%
Prevalence of low birth weight (%)	23%	=<16%
Prevalence of exclusive breastfeeding in less than six months (%)	20%	50%
Prevalence of anemia in women of reproductive age (%)	73%	50%
Prevalence of anemia in children less than five years (%)	70%	50%
Prevalence of overweight in general population especially among	24%	24%
women from 15 to 49 years (%)		
Prevalence of children less than 5 years supplemented with Vitamin A	55%	100 %
Proportion of household using iodized salt (%)	49.9%	100%

The baseline prevalence for wasting, stunting, anemia in children and in women in reproductive age and overweight are from Yemen DHS in 2013. Prevalence of exclusive breastfeeding, Vitamin A supplementation are from Standardized Monitoring and Assessment of Relief and Transitions Methodology (SMART) and Emergency Food Security and Nutrition Assessment (EFSNA) surveys from 2016 to 2019. The consumption of iodized salt by households is from Iodine survey 2015.

Targeted values were defined by the MoPHP high level officials/decision makers (Deputy Ministers, Director general and relevant Programme Directors) using WHO global nutrition targets tracking tool to monitor countries' achievements toward global nutrition targets. Yemen average annual reduction rate (AARR) of the prevalence of the different indicators of malnutrition before the crisis and during the crisis was used to calculate the possible reduction rates for stunting wasting and anemia in women of reproductive age. The same rate was applied for children anemia. The country aims at reaching the global target for exclusive breastfeeding and overweight and to supplement 100 % of the respective targeted population for vitamin A and household consumption of iodized salt.

I. Rationale

Good nutrition is not only essential for a healthy and productive life but also to break the cycle of the intergenerational effects of malnutrition and poverty. Malnutrition, from conception period to the age of two years, irreversibly impedes infant cognitive development and increases the risk of chronic non-communicable diseases such as diabetes, high blood pressure, and cardiovascular conditions¹. Among young children, malnutrition is an underlying cause in over 60% of deaths resulting from diarrhea, over 50% of deaths because of pneumonia and malaria, and over 40% of deaths because of measles² and is related overall to at least 45 % of less than five years' mortality with a life course impact on productivity at all age. Ensuring optimal infant growth from conception, in utero throughout fetal growth, to birth until the age of 2 years (window of opportunity) will contribute to improve the country's human capital, productivity and ultimately to the economic and social development of Yemen. The World Bank estimates that undernourished children are at risk of losing more than 10% of their lifetime earning potential, affecting thus national productivity⁴. Human capital is the foundation of economic development and assuring prevention and early treatment of malnutrition in children will contribute to improving their economic performance through maintaining their full potential of productivity.

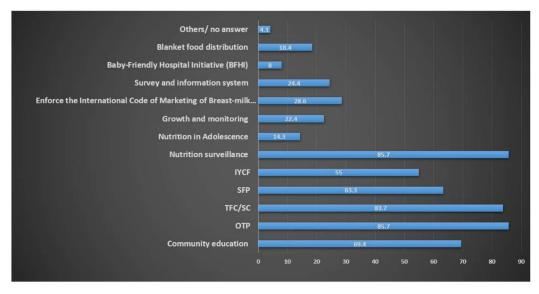
Throughout the last decade, Yemen National Nutrition Strategy 2011–2020 was developed and endorsed to strengthen nutrition actions at all levels of the national health system across the country to address nutritional issues. However, its implementation faced challenges. Yemen experienced conflict and political instability and the country implementation capacities has deteriorated. Yemen social and political unrest rooted back to decades ago due to financial hardships which was complicated by the uprising events in 2011. The country ongoing conflict which started in 2015, led to disrupted essential public services, including health and nutrition among other and exacerbated factors such as the lack of funding has significantly limited the implementation of optimal nutrition activities.

Since the ongoing conflict in 2015, the country nutrition actions have been mainly focusing on lifesaving intervention tackling acute malnutrition in therapeutic feeding centers (TFCs) for severe acute malnutrition with medical complication, outpatients treatment for severe acute malnutrition with no medical complication (OTPs) and moderate acute malnutrition in targeted supplementary feeding programme (TSFP) with respectively WHO, UNICEF and WFP as lead agencies supporting the field implementation of nutrition activities under the leadership of the MoPHP, in addition to other national and international nongovernmental organizations (NGO)

involved in health and nutrition care delivery in Yemen. Insufficient attention is observed in relation to other forms of malnutrition as stated by key informants in the assessment of nutrition interventions implementation in health sector³.

Nutrition activities are focused on malnourished children affected by wasting or nutritional oedema and, to a lesser extent, counselling on infant and young children feeding (IYCF). Moreover, the link between treatment of severe and moderate cases is barely recognized, this link is absent in many places, and children are not treated for moderate malnutrition subsequent to treatment for severe malnutrition. The concepts of "intervention packages" and of a "continuum of care" focusing on 1,000 days which address stunting and other forms of malnutrition are not well understood by health staff at national and subnational levels. Interventions such as child growth assessment and promotion, Baby-Friendly Hospital Initiative, and enforcement of the International Code for Marketing Breastmilk Substitutes are totally absent on the ground.

Figure 1: Health workers and Decision makers in nutrition arena perception on implemented nutrition interventions in Yemen



Activities of infant and young child feeding (IYCF) are delivered mostly through acute malnutrition treatment programmes and nutrition surveillance; community education and nutrition surveillance main purposes are screening and referral of acute malnutrition cases. WHO has supported the establishment of 300 nutrition sentinel sites in district hospitals to screen under five years' children focusing on the four global targets indicators including

anemia, stunting, wasting beside nutritional oedema assessment and exclusive breastfeeding for referral in acute malnutrition programmes, child health programmes and counselling.

During the nutrition strategy implementation period between 2011 and 2020, there has been global and regional commitments to tackle malnutrition in all its forms through different initiatives, conferences, and movements such as the Second International Conference on Nutrition in 2014 with the slogan better nutrition better lives, which set a Framework of Action to address major nutrition challenges, the Decade of Action on Nutrition, SUN-Movement, Zero Hunger, and others. The global nutrition targets of the WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition were endorsed by Member States during the World Health Assembly in 2012 (Resolution WHA65.6) and integrated into the 2030 Agenda for sustainable development goals, to provide an increased political attention to food and nutrition in countries. To accelerate progress towards these global targets the United Nations declared a Decade of Action on Nutrition between 2016 and 2025, focused on six key areas for action⁴.

UN agencies in Yemen has recently developed the United Nations sustainable development goals cooperation framework (UNSDCF) for SDGs achievement finalized in January 2022 covering the period of 2022 to 2024 to replace the one of 2012, 4 times extended with the latest extension ended on 31st December 2020. The UNSDCF (2022-24) will support the planning and implementation of development activities" focusing also on humanitarian and development nexus toward achieving the Sustainable Development Goals (SDGs) in an integrated way, leaving no one behind, is in line with human rights, Gender Equality and Women's Empowerment (GEWE)⁵. The UN has prioritized four pillars according to the SDG priorities of people, peace, planet, and prosperity aiming, to assure an improvement of people's lives in Yemen and build resilience. The four outcomes include: 1. Increase food security, improving livelihood options, and job creation 2. Preserve inclusive, effective, and efficient national and local development systems strengthening 3. Drive inclusive economic structural transformation 4. Build social services, social protection, and inclusion for all. The present nutrition strategy framework contributes to outcome 1 and 4, reflected in a multisectoral manner to cover essential and sensitive nutrition interventions in the relevant sectors⁵.

Nutritional status is influenced by factors from different sectors and there is now greater recognition that multi-sectoral approaches of actions are highly needed to improve the outcome of nutrition targets. These approaches are cost—effective and feasible means to improve nutrition particularly in a humanitarian situation, and there is an urgent need to translate this knowledge into action involving individuals, families, and communities.

Nutrition specific interventions mainly managed by the health sector, can rapidly improve the nutritional status of children if they are implemented during critical times and, throughout the life cycle (from infancy to adulthood). The Lancet Journal Special Series on Maternal and Child Undernutrition⁶ stated that - increasing coverage to 90% - of ten nutrition specific interventions in countries with high prevalence of maternal and child malnutrition could lead to a 20% decrease in stunting and a 60% decrease in severe wasting in children⁶. Nutrition, sensitive interventions, mainly implemented in sectors other than health, such as agriculture, education, social protection are recognized as important for malnutrition reduction in a sustainable manner⁶.

The Food Systems summit convened by the UN Secretary-General as part of the Decade of Action on Nutrition to achieve the Sustainable Development Goals (SDGs) by 2030 and held in September 2021 was an opportunity for countries to re-think their food systems. Guided by five action tracks, all key players⁷ of the global food system came together before, during and after the summit to bring tangible and positive changes to the world's food systems.

The Food systems and Nutrition for growth summits (N4G) also held in 2021 are part of the global efforts to accelerate the reduction of malnutrition in all its forms. In this global effort, country governments, donors and philanthropies, businesses, NGOs, and other key stakeholders together discussed issues related to nutrition and possibilities to address the challenges, including the exacerbated effect of COVID-19 pandemic on malnutrition trends as well as the importance of nutrition in disease prevention and control. The N4G summit emphasized the importance of developing a new policy and financial commitments focus on reversing the impacts of COVID-19 and position nutrition as an essential development priority⁸. These summits were opportunities for governments, international organizations, businesses, and civil society to announce their commitments in tackling global, regional, and local nutrition issues. Discussions were centered around thematic areas including: (1) Health: Making nutrition integral to Universal Health Coverage, (2) Food: Building food systems that promote safe, healthy diets and nutrition, (3) Resilience: Addressing malnutrition effectively in fragile and conflict-affected contexts, (4) Accountability: Promoting data-driven accountability and (5) Financing: Securing new investments to tackle malnutrition to contribute achieving the SDGs⁸. In that respect, Yemen with the support of key UN agencies involved in the food and nutrition arena (WHO, UNICEF, WFP, and FAO) in addition to SUN-Yemen undertook its national dialogues to define its commitments for the transformation of its food Systems which were in line with its Nutrition for Growth (N4G) commitments defined and endorsed⁹ and all in line with the strategy priority areas.

Considering the focus mainly on acute malnutrition reduction actions, the high rates of other forms of malnutrition, the very limited implementation of its strategy for 2011 to 2020 and the changes in health and food security situation due to the conflict and the political challenges together with all underlying factors of malnutrition (See below UNICEF conceptual framework of the determinants of child undernutrition). Yemen decided to redefine its strategic priorities based on national priority for nutrition and in line with the new global and regional initiatives, recommendations and targets harness its humanitarian nutrition actions to development interventions. Essential nutrition interventions implementation is the milestone to move toward the achievement of global nutrition targets¹⁰ and sustainable development goals (SDGs). Therefore, in the country efforts to meet the 2030 goals, the National Nutrition Strategy 2022-2030 will enable Yemen to adjust its previous actions to its evolving needs toward reaching its aim to reduce population morbidity and mortality through good nutrition as well as to assure the economic and social development of the country by harnessing its humanitarian nutrition actions to development interventions.

As stated during the N4G Summit, it is time to unlock the power of good nutrition by adopting stronger, evidence-based nutrition policies and strategy at global, regional, and country levels; Pledging to increase financing for proven nutrition-specific and nutrition-sensitive interventions; and committing to align and harmonize actions across sectors and stakeholders¹¹.

The strategic directions were defined based on the country's vision and priorities and WHO supported nutrition interventions implementation assessment against the new global, regional, and national orientations and recommendations (Yemen Readiness to Accelerate Nutrition Action 2021) undertaken to establish an evidence based strategic priority areas framework with consensus from all key stakeholders in Yemen. This strategy will guide the implementation of interventions toward the achievement of the national, regional, and global targets on nutrition.

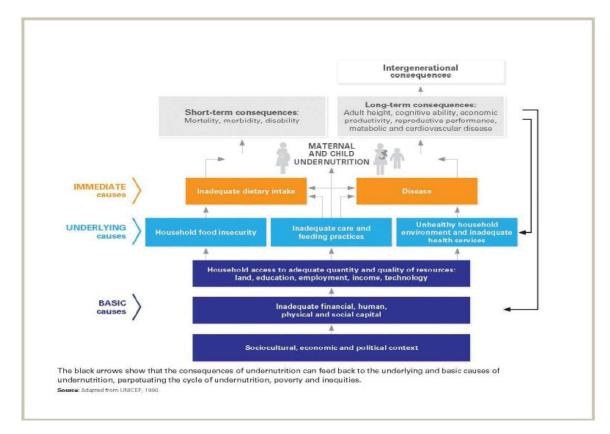


Figure 2: UNICEF Conceptual Framework of the Determinants of Child Undernutrition

Source: UNICEF: https://www.unicef.org/nutrition/files/Unicef Nutrition Strategy.pdf.

II. The Socio-Economic Context of Yemen

1. Economic, Nutrition and Food security, and Health situation in Yemen

Yemen has more than 80% of its population living below the poverty line with no access to basic essential services, including water and health¹². Approximately 70% of Yemen's population live in rural areas and have to travel long distances to the nearest health care post ¹³. The continuing conflict in Yemen has left 80% of the Yemeni population (20.7 million out of 30.8 million people) in need of humanitarian support, and about 12.1 million need acute assistance ¹². This history of poverty and very long political instability, in combination with the civil war, resulted in the destruction of basic infrastructures, economic collapse, increasing number of displaced people, and non-functional public institutions and services in the country. The resulting crisis in Yemen is one of the worst humanitarian crises in the world.

Malnutrition in Yemen was already of public health and emergency concern before the current crisis according to WHO thresholds. The Demographic Health Survey in 2013, revealed that

46.0 % of children under 5 years were stunted, 16.3 % were wasted and 5.6% of them were in critical situation with severe acute malnutrition (SAM)¹⁴. Recent representative data on nutrition are not available due to conflict. Based on SMART surveys undertook from 2016 to 2019 in some governorates with the support of UNICEF, other UN agencies (WHO, WFP and FAO) and national and international NGOs, provided different rates of wasting and stunting. The Yemen Humanitarian Response Plan (YHRP) for 2019 stated that almost 30 percent of all districts were exceeding the WHO emergency threshold of 15 percent prevalence for acute malnutrition (OCHA, 2019). Stunting prevalence was 44,8 % in localized SMART in 2019 reflecting a slight decrease compared to 2013. This prevalence is very high considering WHO thresholds.

Low birth weight in Yemen was 23,4% in 2013. These infants have higher risk of death in childhood. Infant and young child feeding practice is suboptimal in Yemen, only 10% of less than six months were exclusively breastfed in the DHS 2013. However, in the SMART survey in 2018 in 17 governorates out of 22 the rate of exclusive breastfeeding was 20,0% showing an increase but still far from the global target of 50%. Only 15% of children 6 to 23 months had a minimum acceptable diet. This suboptimal practice of infant feeding contributes to the high rate of malnutrition in children less than five years. Among women aged from 15 to 49 years 25% were thin and 24% were overweight during the DHS 2013 showing that Yemen is suffering from the double burden of malnutrition. Micronutrient deficiencies is also of great concern in Yemen, anemia rate among children under five years in the smart surveys was 68.3%. 78.2% of pregnant women and 74.6% of lactating women are affected by anemia with respectively 8.5% and 4.1% severe cases. Only 6% of pregnant women were supplemented with iron folic acid during pregnancy and 3 % percent received deworming drugs. 55% of children less than 5 years were supplemented with vitamin A and 12% benefitted from deworming. Iodine deficiency disorder (IDD) increased from 30.6% in 1998 to 49.7% in 2015 as showed by the respective national IDD surveys.

Yemen has been facing food insecurity emergency due to the armed conflict ongoing since 2015, the macroeconomic crisis that increased the national inflation rate and devastated purchasing power of the Yemenis. During this crisis, the commodity supply chain has been severely affected due to restrictions on importation and exportation from/in ports and airports, increasing fuel prices, affecting food prices, and security fees charged by armed groups who control several checkpoints on the main roads of transportation inside the country added additional burden. On the other hand, the population's purchasing power has been severely reduced due to unemployment in the private-informal sector and nonpayment of salaries in the

public sector. According to the IPC March 2022, 17.4 million (54 % of the total population) are experienced acute food insecurity are estimated to be in Crisis (IPC Phase 3). Of greatest concern is the 31,000 people facing extreme hunger levels (IPC Phase 5 Catastrophe) during the current analysis of the IPC food insecurity, rising to 161,000 by June 2022¹⁵.

Before the crisis, more than 5,000 public health facilities were severely short-staffed, and most were in urban areas. According to HeRAMS 2018, almost 50% of Yemeni health facilities were not functional, and those health facilities which continue to function lack specialists, equipment and essential medicines17 demonstrating the weakness of the health system. HeRAMS 2020 revealed that 49% of HFs are either non-functioning or just partially functioning and fully functioning health facilities lack some health services. 11% of % are either fully or partially damaged and in need of rehabilitation.

Almost 35% of districts have no functioning hospitals at all, and 19 out of the 22 governorates lack sufficient health workers. There is a severe shortage of human resource. Yemen has 12 health workers per 10,000 people almost half of the WHO standard threshold. There are also no specialists in 97 out of 261 functioning hospitals. A severe shortage is also for the number of available inpatient and maternity beds with less than 6 inpatient beds available per 10,000 people, half of the WHO standard threshold.

Communicable diseases represent the largest disease burden in addition to increasing non-communicable diseases ¹⁶. Pneumonia, diarrhea, malaria, dengue, and measles are the most prevalent diseases among children in Yemen ¹⁷. The spread of outbreaks, not limited to cholera, diphtheria, and recently COVID-19 in Yemen, is devastating the already weakened health system and impacts negatively on health and nutrition, as well as the general wellbeing of the population. Maternal mortality remains high, not less than 12 women dying every day; the last estimates of health and development indicators in Yemen showed a maternal mortality ratio at 385 maternal deaths per 100,000 births. In Yemen, one child dies every 10 minutes due to preventable diseases¹⁹. The mortality rate among children under 5 is 48 deaths per 1,000 live births, and infant mortality rate is 43.2 deaths per 1,000 live births ²⁰⁻²². Non communicable disease (NCD) are estimated to be responsible of 71% of all deaths of the population, cardiovascular disease, cancer, respiratory diseases and diabetes are the most common NCDs and account for over 80% of all premature NCD deaths¹⁸.

Yemen has been making efforts to reduce vulnerable population mortality through enhancing humanitarian health and nutrition actions. With the support of multiple donors, in line with the different Yemen Humanitarian action plans strategic objectives and targets, the WHO and

UNICEF have sustained and scaled up the provision of health and nutrition service package in almost all functioning health facilities to avail access to critical services to respond to the dire needs of the population and maintain the health system operational at all levels (primary, secondary, and tertiary health care).

2. Yemen Readiness to Accelerate Nutrition Action in Health Sector 2021

The findings are the synthesis of results from the literature review based on various resources or data sources such as Yemen food and nutrition Laws, Regulations, Strategies, Humanitarian response documents including YHRP, Yemen HNO and other reference documents. The findings have also been derived from interviews with key informants at governorate, district, and health facility levels working with national and international institutions as indicated in the figure below.

1-Deputy Minister, 2-PHC, 3-Social Fund for development Nutrition, 4- Child H, 5- RH, 6information system, 7-HWs Supreme authority for specification MoPHP, MOPIC, Education, National Drug authority Agriculture, industry, Water Manufacture, Hospitals, Aden, Sana'a, Hadramout NGOs Save the children 1- WHO Donor 2- UNICEF 1-WB 3- WFP 2- EU 4- FAO 3- KSA 5- NC

Figure 3: stakeholders involved in Yemen readiness assessment for nutrition action

Perception of stakeholders on nutrition actions

A wide array of stakeholders has been working in nutrition arena in Yemen with a particular focus on nutrition and food security during the current fragile situation. They include beside the government, UN agencies, bilateral and multilateral donors, academia, parastatal entities, and the private sector.

The general perception among stakeholders in Yemen is that there is significant focus on malnourished children affected by wasting or nutritional oedema. This could be attributed to the high caseload of acute malnutrition over the years (figure 4 below) and the higher mortality among affected children when no treatment is provided.

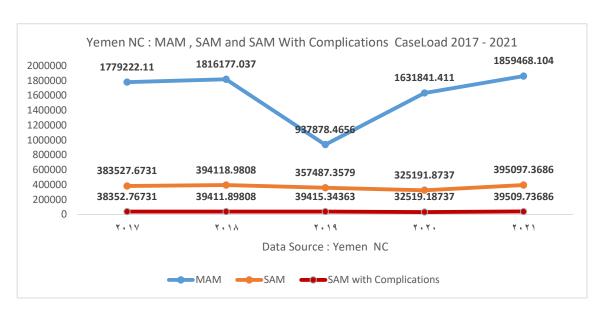


Figure 4: Trend of acute malnutrition caseload over the years (2017-2021)

There is an insufficient recognition of other maternal and child malnutrition problems such as micronutrient deficiencies or stunting, therefore nutrition activities are to lesser extent, on complementary feeding and caring practice of infant and young children. Before the conflict, there were some projects for food fortification (adding iron, folic acid to flour, vitamins to oil, and iodine for table salt), these are currently not being implemented. There are no or very few interventions recognized regarding overweight and obesity, nutrition during illness, food safety in health sector and adolescent nutrition. However, for food safety there has been a strong political commitment during these last years from the Ministry of Health and guidelines developed and endorsed by the government.

Political commitment and Coordination

The Country commitment to act for nutrition is reasonably strong. Approved by the Cabinet in 2011 by Resolution No. (110) the National Nutrition Strategy 2011-2020 targeted undernutrition, including wasting, stunting, anemia, micronutrient deficiencies, undernutrition in schools and in emergency. Other guidance documents were developed including the national guideline for the community-based management of acute malnutrition in 2012, the national protocol of the management of severe acute malnutrition with complication updated in 2021 and an operational guideline for IYCF also updated in 2021. There is no national guideline focusing on micronutrient deficiencies. Many legislative decisions were issued by the Yemeni Parliament to tackle micronutrient deficiencies through staple food fortification; in 2001 fortification of vegetable oil and margarine with vitamin A and D and of wheat flour with iron and folate was approved, in 2002 protection, promotion and support of breastfeeding resolution was approved and in 2003 a legislative decision for salt fortification with iodine. In 2015, a national guide for international code for marketing breast-milk substitutes was developed but not endorsed.

Under the coordination of the MoPIC and the SUN-Yemen movement, the country developed its MSNAP aims to reduce all forms of malnutrition, addressing immediate and underlying factors from 2020-2023, and its road map on child wasting reduction (Yemen Action Plan 2021) endorsed for implementation. The MSNAP is structured around three main priority areas: 1. nutrition-specific services and interventions, 2. nutrition-sensitive activities, 3. strengthening government leadership, national policies, and capacities in coordination. A National Strategy for Social and Behavior Change (2018) was developed by the Nutrition Cluster and the MoPHP aiming at reducing undernutrition, mortality, and morbidity amongst children 0 to 2 years of age through optimal IYCF. Despite the political commitment to nutrition in Yemen, nutrition programs are inadequately implemented.

Human resources for nutrition

The number of trained nutritionists is limited in Yemen; only 8.6% of the respondents have a nutritional background, the nutrition activities in health facilities are implemented by health staff; nurses, midwives, medical assistants, or medical doctors, as well as other health staff such as pharmacists and radiologists. Pre-service training on nutrition in medical and health schools is limited to few hours and outdated knowledge. There is no public university providing curricula for public health nutritionists or community dieticians training. A few private universities established an academic nutrition programs for undergraduate students. There is

not a clear employment policy and job descriptions for employees. The in-service training on nutrition is focusing mainly on management of acute malnutrition and nutrition surveillance.

Funding sources and orientations

Nutrition activities are mainly humanitarian intervention funded by donors particularly since 2015. There are significant resources allocated for the management of acute malnutrition and the reduction of food insecurity. The domestic budget is limited to cover some of the basic operational cost, infrastructure, and staff cost. Therefore, there is a brain from public sector due to lack of fund for salaries.

Nutrition information system

Nutrition data are available from multiple sources and platforms, including routine reports from health facilities focusing on acute malnutrition. There are different information channels created by different partners in the field to collect data from the same health facility. Although the routine report is collected regularly, there is no national analytic report issue by health authorities on regular bases, each partner analyzes and present the data based on its own protocol for decision making. Most partners depend on the nutrition cluster yearly analysis of the caseload to determine priority areas and identify needed supplies and support. One of the challenges in the health information system is the absence of implementation of the general framework of the routine nutritional indicators in health sector endorsed by the government and consistent with the global framework for monitoring the global nutrition targets 2030.

National surveys are another source of information. Nutrition cluster and UNICEF are the main supporters of SMART survey, WFP, and FAO support food security surveys, and WHO the routine nutrition surveillance sentinel sites system.

Humanitarian Nutrition Governance

The humanitarian response in Yemen is defined each year from key needs described in the HNO which is converted into strategic objectives and actions in the Humanitarian response plan. As above stated, nutrition interventions are mainly based on acute malnutrition management and some monitoring activities under the umbrella of nutrition information system. In 2021, the Nutrition Cluster strategy in Yemen humanitarian response plan covers three main areas 1) scaling up availability and access to treatment and preventive services, 2) improving the quality of nutrition services, and 3) enhancing the timeliness of response. This is implemented through

an inter-sectoral approach guided by the HRP strategic objectives (reduce disease outbreaks, morbidity and mortality and prevent famine and malnutrition through multi-sectoral integration of nutrition activities). In 2018, there was the integrated programming for famine risk reduction (IFRR) prepared jointly by WASH, Nutrition, and Food security and agriculture cluster (FSAC).

Strengths Weaknesses Opportunities and Threats (SWOT) of the readiness assessment

Opportunity	Strengths	
Governance	Governance	
 Nutrition is a priority in Yemen Humanitarian nutrition interventions are partially funded Partnership with UN organizations and national and international NGO as nutrition actors Coordination mechanisms at central and hubs levels by the government and the UN Availability of capacity building opportunities for health workforce in nutrition Implementation Support of nutrition information system by international partners at country, regional and global levels Support of free of charge acute malnutrition treatment and prevention programs Social safety net with blanket feeding, general food distribution, Cash for work, for food Weakness	 Decision-makers at MoPHP aware of the nutrition problems (Acute Malnutrition) in Yemen and its impact on the country development and people productivity, and willing to reduce the burden in Yemen. Nutrition department at central level in the MoPHP Availability of academic institutions, public and private for nutrition training. Availability of multi-sectoral action plans and humanitarian response plan Implementation Structure of health system is available and well designed and few nutrition activities already implemented in different health programs Availability of existing health information system Availability of trained health workers implementing nutrition interventions Availability of community Volunteers supported by UNICEF 	
Governance:	Political environment	
OOVERHALICE.	1 onucai environment	

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- Insufficient national leadership in sectoral or multi-sectoral coordination of nutrition actors causing to have the responses on the reactive mode rather than preparedness and active mode.
- Inadequate coordination or collaboration with nutrition and other health programme providing nutrition interventions at central governorates and district levels
- The role of each sector is not clearly defined for all national actors- and nutrition is not integrated in the strategy or policy of other sectors
- Insufficient Human resource at all levels in terms of numbers, and technical knowledge
- Insufficient or lack of nutrition education in schools, health institutes, and universities.
- No or little use of the existing work force of volunteers or health workers at community level
- Lack of female staff in rural areas

<u>Implementation</u>

- Insufficient collaboration or integrated programming or implementation between MoPHP and other relevant ministries for nutrition interventions
- Insufficient or lack of collaboration between different health departments at MoPHP (nutrition, maternal, child health...).
- Weak enforcement of laws and legislations
- Information system is weak, and not harmonized throughout data chain from data generation to utilization with different indicators, channels, and reporting ways for each partner
- Weak quality for management and monitoring regarding logistics and supplies.
- Focus on acute malnutrition, no interventions on other nutrition problems
- Limited access to the third level of catchment areas

- Absence of updated policies and strategies
- Lack of government national and local budget for nutrition activities Implementation
- Lack of Security
- Few funds for health system strengthening
- Reduction or stop of funding for humanitarian nutrition interventions
- Payment of incentives can create a challenges for the MOPHP in the future, however stop of incentives cause collapsing of services.
- Lack of sustained community awareness on nutritional issues for children and mothers as well as adolescent
- Lack of nutritionist and qualified people in the country. (unplanned rotation of staff (untrained) in hospital disturb the nutrition services)
- Spread of Outbreaks, for example COVID-19 divert priorities

Recommendations of readiness assessment

Advocacy for ensuring that all forms of malnutrition are addressed Medium term:

- Advocate for essential nutrition action package (all forms of malnutrition) for Yemen development and implementation focusing mainly on the first 1000 days' interventions and on adolescent.
- 2. Assure media campaign for the public knowledge building focusing on the importance of nutrition for children to thrive, improve human productivity and country development.

Long term:

Develop advocacy materials to sensitize members of health and non-health sectors on the
importance of nutrition for social, economic, cognitive, and physical development (many
health and non-health staff who implement nutrition sensitive interventions are not aware
of the importance of these intervention for good nutrition status. They may consider
nutritional issues as disease needing to be treated only).

Programme Planning and Implementation for nutrition Medium-term:

- Revise and endorse national guide for training health workers on the international code of
 marketing of breast-milk substitute and develop a mechanism for monitoring its
 application and to support the enforcement of laws and regulation related to the
 implementation of Baby Friendly Hospital Initiative under its new modalities.
- 2. Focus on 1000 days' interventions and support growth assessment and promotion activities by measuring the length of all children <2 years of age during immunization visits, from 0 to and 18 months for stunting prevention.
- 3. Counsel all mothers on appropriate infant and young child feeding practices to reduce suboptimal practice for malnutrition prevention
- 4. Measure anemia and wasting in pregnant and lactating women as part of Antenatal care (ANC) and post-natal care and assure referral.
- 5. Continue screening children, particularly under five years of age, during routine health activities for wasting identification and treatment.
- 6. Contextualize all action plans for the related sectors to include nutrition sensitive and specific policies and activities to better identify and respond to any nutrition-related threats and events. This needs higher-level commitment from the government and its pillars ministries.

Long term:

- 1. Implement a process to identify ways to strengthen poverty reduction and food security programs for increased impact on child and maternal undernutrition, such as supporting food subsidies.
- 2. Develop the standard organizational structure (organogram) for nutrition departments in MoPHP and Health facilities.
- 3. Develop a nutrition services package focusing on children, pregnant, and non-pregnant women as one package.
- 4. Develop and implement a strategy for reaching school-age children, adolescent, and prepregnant women. For example, support school feeding programs, education focusing on gardening and eating habits
- 5. Strengthen national food fortification and micronutrient programs.
- 6. Updates the nutrition guidelines and strategies based on the previous projects/years lessons learned and experience and latest global recommendations.
- 7. Improved quality of nutrition services through supporting mentoring and monitoring.

Coordination at central, governorate and district levels of nutrition stakeholders Short term

1. Create national, governorate and district levels coordination mechanisms lead by the national high agency with support of UN organization to oversee the implementation of the National Food and Nutrition interventions and to harmonize the practice of the actors.

Medium term:

1. Harmonize the Food and Nutrition Action Plans based on the national plan, decree, and guidelines, and develop intersectoral coordination mechanisms to monitor the implementation, guide funding and strengthen the information system.

Long term:

1. Control of the marketing of breast-milk substitutes requires a national multisector effort and laws and legislations application and enforcement.

Funding sources to address nutrition in all its forms

Medium-term:

- 1. Increase cost-effectiveness of funding by choosing evidence-based interventions targeted at vulnerable groups including emergency and non-emergency nutrition actions.
- 2. Use strong leadership to capitalize the use of fund allocated for Yemen, develop a mechanism to avoid wasting of resources, and reduce duplications.
- 3. Identify funding areas for nutrition in related non-nutrition projects to optimize the efficient use of the fund in the ground.

4. Allocate sustainable fund cover the gap that allow the partners to purchase the supply (due to the purchase policies of UN there is a delay in receiving the supply which leads to a huge shortage).

Long term:

1. Identify priorities to fund sustainable projects, not just emergency projects nor specific interventions.

Human resource capacity building for nutrition intervention implementation Medium-term:

- 1. Develop Job description of staff working in nutrition positions.
- 2. Develop a human resource map for nutritionists and other health workers to identify deployment gaps and competencies and develop a map for academic institutions that provide nutrition courses.
- 3. Develop a national incentive policy for staff working in challenging situations based on the job description.
- 4. Continues in-service training for staff to bridge the gap in capacity building.
- 5. Strengthen the capacity of Community Health and Nutrition Volunteers (CHNVs) to enhance Community Engagement and mobilization.
- 6. Development of C-MAM user-friendly protocol and rollout of Training: to reach all localities in reasonable time and achieve the coverage targets.
- 7. Develop quality of care guideline for nutrition intervention.

Long term:

- 1. Develop and update nutrition curriculum.
- 2. Strengthen nutrition training in medical school curricula.
- 3. Support the nutrition pre-services training.
- 4. Develop in services training program focusing on on-job training and distance learning. process to update the staff with new recommendations but avoid disturbance of services due to absence of staff during physical training.
- 5. Include nutritional management in communicable disease context such as COVID_19 and cholera.
- 6. Develop an employment policy for nutrition in all sectors based on the need.
- 7. Establish accreditation requirements and procedures (including training qualifications for nutritionists at all levels).
- 8. Improve the capacities of health workers in research, information management, analysis, programming, policy, and implementation.

9. MoPHP to reinforce the nutrition department with specialized nutritionists at the governorate/district level that provides technical support and manages OTPs, SFP, Communication for Development (C4Ds), TFCs, and IYCF at the district level.

Nutrition Information System strengthening (NIS)

Medium term:

- 1. Develop an information framework with a unified platform to collect data from all sectors based on agreed national nutrition indicators. Considering the six nutrition global targets as main national targets to achieve and IYCF indicators.
- 2. Monitor nutrition intervention through defined national routine indicators for health sector and the Common Result Framework of the MSNAP.
- 3. Use standard indicators to guide supervision mechanism and to assess performance.

Long term

 Create a national nutrition information task force including all partners collecting nutrition indicators, for example reproductive health (RH) working on anemia and low birth weight (LBW), immunization working on vitamin A distribution and growth assessment and promotion (stunting, wasting, exclusive breastfeeding).

The recommendations oriented the definition of the strategic priority areas of action and the implementation will prioritize target groups within the 1000-day window of opportunity (adolescent girls, pregnant women, breastfeeding women, and children under five) and the most vulnerable regions. The scale up will be done gradually both for the choice of interventions but also the choice of geographic areas. Precedence will be given to interventions that can be scaled up quickly given the country's implementation capacities. The other interventions will be implemented according to the improvement of the country capacity.

III. Strategic Priority areas for action

The nutrition strategy consists of 7 strategic priority areas to achieve the vision of the national nutrition strategy which is to ensure good nutrition status for all Yemenis through sustainable nutrition actions to reduce morbidity and mortality related to nutrition. This will significantly contribute to a healthier population essential for the country economic development. The country nutrition programs, projects and action plans will support the realization of the seven strategic priority areas outlined below:

1 Maintain a conducive environment through assuring the sustainability of the political commitment

Sustaining the political commitment for nutrition interventions will enable the implementation of the Nutrition Strategy action plans in health sector and in other relevant sectors.

- 1.1 Review existing structural frameworks to ensure governance of nutrition interventions at all levels.
 - *Result 1.* Central nutrition structure is cascaded at governorate level to enable a decentralization of governance and implementation.
- 1.2 Strengthen nutrition institutions at central, governorate and district levels, and program implementation coordination.
 - Results1: Nutrition operating systems (directorate, department, or unit) capacities at central, governorate, district, and community levels are strengthened in all relevant sectors.
 - *Result2:* platforms of collaboration among governmental entities in all relevant sectors, especially; agriculture, Trade & industry, Education, WASH and social protection are identified and functioning at governorate and district levels (identify role and responsible body).
- 1.3 Advocate to mobilize decision makers for including nutrition and food safety interventions in all relevant national development policies or strategy.
 - *Result1*: Policy brief on each nutrition problems and challenges with proposed possibilities of solutions are developed and used for advocacy and sensitization meeting with decisions makers and leaders at all levels.
 - Result 2: The Yemen scaling up nutrition movement coordination body has entities at governorate and district levels in coordination with MoPHP.
 - Result 3: A central multi-sectoral coordination body (Yemen scaling up nutrition movement) is supported by relevant parties at the highest level of the government.
- 1.4 Sustain and expand inter sectoral coordination between decision makers in the field of nutrition and food safety, and invest in food safety interventions.
 - Result 1: Existing laws are revised in line with latest global recommendations and Yemen evolving context.
 - Result 2: Existing Laws for conducive environmental to support the multi-sectoral implementation to improve nutrition are enforced.

- Result 3: Nutrition and food safety are reflected in all government development and emergency response policies, strategy, and plan of action and in relevant sectors background documents.
- Result 4: Nutrition and food safety aspects are integrated and implemented in all government's sectors, especially; Agriculture, WASH, Education, Trade & industry, and social protection.
- 1.5 Secure a funding commitment to ensure the continuity of nutritional services, within the framework of national priorities.
 - *Result1*: Nutrition and food safety components are budgeted in all relevant sectors budget lines to enable the implementation.

2 Ensure community engagement for increased awareness of nutrition and improved uptake of appropriate nutrition practices and behaviors

Community engagement will support sustainable positive behavior change for long term impact.

- 2.1 Promote nutritional knowledge and appropriate attitudes and practices of caregivers and adolescence towards food, social and dietary customs, family/childcare and feeding practices as well as household hygiene,
 - Result 1: Knowledge and practices of food & nutrition, hygiene, health care practices for infant, children at community level are optimized and contributing to children healthy growth.
 - Result 2: Knowledge and practices of food & nutrition, hygiene, health care practices for adolescent and pregnant / lactating women are optimized and contributing to a good nutrition status of the entire community.
- 2.2. Establish communication mechanism for all actors of nutrition at community level, including civil society, and community leaders.
 - Result 1: Communication for development or for health strengthening practice or behaviors and social norms favorable to nutrition is strengthened at all levels and across the different social platforms involving leaders, women, and youth.
 - Result 2: Community have adopted best practice behaviour to improve mothers and children nutritional and health status.
- 2.3. Integrate nutrition and health interventions using CHNVs/Community health and nutrition workers (CHNWs) and midwives at community level.

Result 1: Essential nutrition and health good practices to assure healthy eating and children healthy growth are promoted by community health workers, community health volunteers and midwives for their adoption and practice in households by the entire community.

3 Improve the multi-sectoral coordination and engagement involving all sectors and levels of government, as well as other stakeholders in prevention and management of malnutrition (specific and sensitive nutrition interventions),

Nutrition sensitive interventions implementation are key to tackle the underlying factors of malnutrition in a collaborative manner to reduce the burden.

- 3.1. Establish a national mechanism for communication and integrative coordination for multistakeholder interventions.
 - *Result1:* A central coordination, communication and collaboration lines among all nutrition stakeholders are defined and used for implementation.
 - Result 2: Information dissemination and used and event and activities organization or implementation are clearly defined, and roles and responsibilities shared among all national stakeholders.
- 3.2 Adapt and enhance cross-sectoral collaboration in school health and food/nutrition programs.
 - Result 1: School Health and nutrition policy and standard as well as guidelines for provision of healthy food in schools are formulated enforced through developed action plan implementation.
 - Result 2: Schools are used as platforms to enhance the shifting to sustainable consumption patterns for communities to adopt healthy eating habits for an improved children and adolescent health and nutrition.
 - 4. Strengthen the access and provision of nutrition services to address all forms of malnutrition and scale up preventive services in the context of universal health coverage.

Timely reaching the most in need and the most affected populations through expanding accessibility to essential nutrition interventions will enable the improvement of their health status.

4.1 Ensure early detection of all forms of malnutrition through nutritional assessment and integrated management of malnutrition,

- Result 1: All children attending any health facility is nutritionally assessed and appropriately referred.
- Result 2: Essential nutrition interventions are provided in child and maternal health care platforms through universal health coverage to improve the availability of nutrition action in health system and greater well-being and more equitable development is achieved.
- Result 3: Communities are aware of nutrition and health interventions availability and access to assure a positive pregnancy experience for mothers and children less than five years' healthy growth.
- 4.2 Expand coverage and reinforce the implementation of IYCF, with a specific focus on exclusive breastfeeding, and complementary food.
 - Result 1: All mothers and pregnant women are benefitting from counselling on appropriate IYCF based on their social condition and local available and widely accessible seasonal nutritious food.
- 4.3 Strengthen implementation of the new recommendations and modalities of Baby-friendly Hospital Initiative (BFHI) in maternity facilities and new-born units with linkages with community,
 - *Result 1:* National BFHI protocol is revised and strengthened at central level to assure national leadership and coordination to protect, promote and support breastfeeding.
 - Result 2: Health workers are skilled to provide at governorate, district and health facility level in maternity and new-born unit sustainable services to protect, promote and support breastfeeding.
 - Result 3: Collaboration is strengthened between health facilities providing maternity and new-born services and other breastfeeding support initiatives outside facilities for the coordination of the Baby-friendly Hospital Initiative to assure the continuum of support to mothers.
 - Result4: Improved community support for breastfeeding.
- 4.4 Revise and enforce the implementation of the code of marketing of breast milk substitute to support an optimal infant and young child feeding,
 - Result 1: The National Code of Marketing of Breast-milk Substitutes is revised according to the international code of marketing of breast milk substitute and all its subsequent World Health Assembly Resolutions to regulate marketing of formula products and foods for infants and young children and the application enforced.

- 4.5 Implement wasting prevention measures for vulnerable children and other groups at risk of being too thin, including small and nutritionally at-risk infants, older people, and those with serious health conditions,
 - Result 1: Vulnerable populations (including small and nutritionally at-risk children, children with medical condition, older people and adolescent and adult with health condition needing a nutritional follow up) are nutritionally assessed at health facility level for early detection of wasting and they received needed nutritional care and support to prevent or treat wasting.
- 4.6 Provide appropriate micronutrient interventions reactivate stable food fortification including iodine, Fe, folic and vitamin A and E and supplementation of Fe, folic acid, zinc, Vit A.
 - Result 1: micronutrients deficiencies prevention is enhanced through food fortification, supplementation, diversified food availability and healthy eating promotion.

5. Support nutrition in emergencies, preparedness and response.

Assuring critical nutritional care during emergency is a lifesaving component of emergency response to reduce mortality and morbidity in the most vulnerable population.

- 5.1 Address all nutritional needs and problems in emergency preparedness and response strategic documents,
 - Result 1: Relevant nutrition interventions during crisis are integrated in contingency plan, emergency response plan and all strategic documents including Yemen humanitarian response plan, Humanitarian needs overview and others.
- 5.2 Build capacity on nutrition in emergency interventions,
 - *Result1*: All national stakeholders are skilled to provide quality nutrition interventions to respond to humanitarian crises.
 - Result2: Essential Nutrition intervention are sustained and scaled up when needed including TFC, OTP, TSFP, food distribution, prevention actions, and nutrition surveillance to respond to the protracted humanitarian crisis and enhance the population's ability to live.
 - Result 3: Malnutrition prevention and treatment are effectively addressed in fragile and conflict-affected districts for a strengthened population resilience.
- 5.3 Rationalize humanitarian aid for the most vulnerable groups and at risk of malnutrition,
 - Result 1: Multi-sectoral humanitarian aids are accessible to groups at risk of malnutrition in the various humanitarian aid programs.

- 5.4 Improve the food consumption status of the population at risk by integrating and coordinating measures and humanitarian assistance to mitigate food insecurity impact for the population facing IPC Phase 3 and above conditions.
 - *Result1:* Vulnerable households have access to social protection services and their resilience is strengthened to enable them to face crises related to food insecurity.
 - 6. Support capacity building of institutions and health workers to improve the quality of nutrition services.

Skilled Health workforce and strong national institutions are all key factors for quality-of-care assurance.

- 6.1 Build institutions capacity in developing reference documents for quality of care and improve supervision for quality-of-care assurance.
 - Result 1. Frameworks of quality of care for all nutrition intervention are defined and used to monitor and evaluate service provision.
 - Result 2: The guidelines and protocols of nutrition service delivery are in line with global recommendations and accessible to all workers to assure a continuity of quality of care.
 - Result 3: The skills of service providers are built by providing guidance, training, jobaids for adequate service delivery at all levels to properly and safely provide good quality nutritional services.
 - Result 4: Continuous quality of care is assured through updating health workers,
- 6.2 Share experiences on nutrition intervention implementation at internal and external levels.
 - *Results1*: Enhancing the skills of national cadres and actors in the field of nutrition for best practices through exchanging experiences and strengthening aspects of cooperation South-South or South-North.
- 6.3 Revise or develop nutrition curriculum for health institutes and universities in line with global guidance and include nutrition in pre-service training in medical school.
 - *Result 1:* Graduates of universities and health institutes have sufficient knowledge and skills to provide good essential nutritional services.
 - Result 2: Nutrition specialists are enrolled in the nutrition services in public health facilities.
- 6.4 Introduce nutrition and agriculture topics in the curriculum of primary and secondary schools.

Result 1: Curriculum for food and nutrition are developed for school children and taught to sustain healthy diet.

7 Enhance nutrition information systems, monitoring, and evaluation.

7.1 Strengthen the nutrition surveillance system at all settings (HF, Communities, School, and others) to provide updated information and to make informed decision and act for timely response.

Result 1: Nutrition status is assessed in all settings for timely diagnostic, and appropriate nutrition actions are provided.

Result 2: Rapid assessment or small-scale Surveys are regularly conducted specially in outreach areas.

7.2 Invest and build on Secondary data collection and analysis related to Nutrition indicators from all sources.

Result 1: Master Key indicators are identified, integrated into data collection source tools and nutrition information system developed action plan is implemented.

Result 2: Data analysis and utilization is performed at all levels.

Result 3: Reports are prepared and shared with all relevant parties.

7.3 Establish National Nutrition research committee under the leadership of Nutrition Department - MoPHP and membership of Partners (UN agencies, Academic institutions, Civil Society and others).

Result 1: Research committee is established, and research results are published and used.

IV. Responsible Structure for Implementation and Funding Mechanisms

Nutrition interventions sensitive or specific are implemented in a multi-sectoral and multidisciplinary manner imposing, therefore multiple stakeholders to work together. The implementation rules and regulations shall clearly identify institutions to be involved in this endeavor and define their missions, roles, and responsibilities, this being essential for the success of combatting malnutrition in all its forms.

1. National Implementation Bodies and Structures

At central level

A coordination body overarching all the ministries should be created. SUN-Yemen-Movement can support the coordination work of all stakeholders. The role of the overarching coordination

body will be (i) to promote the sustainability and scaling up of nutrition actions in all sectors; (ii) Ensure the updating of the Common Result Frameworks of MSNAP based on the contribution of each sector; (iii) improve the coordination and collaboration among all stakeholders to make each contribution efficient; (iv) support joint planning, programming, and implementation to achieve the Common-Result-Framework; (iv) advocate for an increase of the national nutrition budget line and for resource mobilization; (vi) assess the progress made in the implementation facilitate best practice and experience sharing and propose solutions for challenges.

The Ministry of Health nutrition department will be the main entity responsible of nutrition actions in health sector. Each relevant ministry or institution will be responsible or contribute to providing nutrition activities needed in its sector or field.

At Governorate and district levels

The Governorate Health Offices (GHO) will support the implementation of national health and nutrition programs through distract offices and health facilities, GHO is responsible on the coordination between nutrition activities and other health programs as well as other non-health sectors. GHO will coordinate all relevant activities with all stakeholders working in the governorate.

2. Funding Mechanisms

The main source of funding in nutrition is from external funding. There is a key need of diversification of funding sources, with gradual increase of national investment for addressing nutrition issues. The government of Yemen shall allocate more domestic fund to nutrition and then seek for external sources of fund with the support of international partners to cover the gap and ensure the sustainability of nutrition interventions.

The country shall work on suitable mechanisms to finance nutrition interventions at national level. National funding sources could be state and local government budgets, and other legal financial supports which the state will allocate to national nutrition program and projects. Financial resources should be supervised and managed effectively to ensure the equality and equity in nutrition care for all people and optimal utilization. Nutrition and food safety intervention should be appropriately reflected in all sectors strategies and plans including their budgets.

International partners for nutrition should sensitize and advocate at global and regional level with donors. Most available funding for nutrition is allocated for nutrition specific

interventions, resource allocation for nutrition sensitive interventions is also critical to improve all forms of malnutrition in Yemen.

As inter-programme resource mobilization relevant sector opportunities such as immunization, communicable diseases, maternal and child health can be used to implement nutrition activities in these platforms through a joint programming and planning when resource are available in these programmes.

V. Monitoring, Evaluation, Accountability and Learning Plan

Monitoring and Evaluation

The nutrition strategy covers a nine-year period. The establishment of an integrated monitoring and evaluation system will be based on core input, output, outcome, and impact indicators specific to each sector and cross-cutting indicators. The monitoring and evaluation will be carried out using a matrix developed for each action plan and the agreed evaluation criteria in line with common results framework of the MSNAP to evaluate the accessibility of the care, the geographical coverage and impact of the actions being rolled out in various sectors and programs on population wellbeing for nutrition and health. These indicators will be disaggregated by geographical area of intervention, by gender and by age. Additional indicators for inputs and process monitoring can be defined as needed and use for the purpose of assuring the quality of delivered services. Progress towards set targets will be monitored continuously through the health and nutrition information system. Proxy short and intermediate indicators generated from local surveys conducted by partners of nutrition cluster will also be used.

A midterm and final evaluation will be rolled out to assess the strategy implementation based on the OECD DAC¹⁹ evaluation criteria see the graph below. The OECD Development Assistance Committee is a unique international forum of many of the largest providers of aid, including 30 members.

Figure 5: OECD DAC evaluation criteria¹⁹



Midterm and Final Evaluation

The mid-term and the final evaluation will be under the supervision of the overarching coordination body. The goal of the evaluations is to assess the relevancy of the programme, effectiveness, coherence, sustainability, and impact. The midterm evaluation results will support the development of the subsequent adjusted work plan toward reaching the results not on track during the following years.

During the final evaluation, opportunities to expand the project will also be assessed as well as challenges, strengths, and constraints as well as lessons learned for the next step.

Monitoring and evaluation process

Routine data will be collected and transferred, compiled, and sent to subnational (district and governorate levels). Quality check to ensure, completeness and accuracy will be performed throughout the data collection and reporting process.

The data will be analyzed at health facility, district, governorate, and national levels for decision making. At national level, data will be compiled and an in-depth analysis with underlying factors data from health programs or other sectors data will be done. Through monthly or quarterly report or dashboard, the results will be disseminated to all stakeholders and store in an accessible manner in relevant websites for ease of reference.

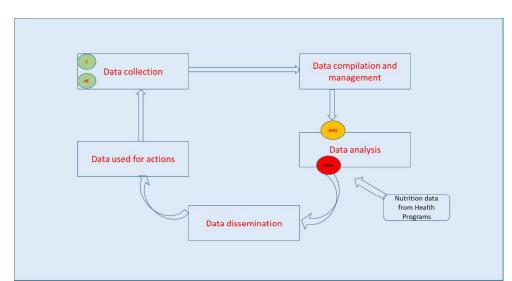


Figure 5: Monitoring and Evaluation process

Stakeholders Accountability to Beneficiaries

The MoPHP will monitor the implementation of nutrition activities regarding their quality and coverage of targeted population to make sure population are benefitting from the investments in nutrition in an optimal manner. This accountability to the beneficiaries will be assessed based on the commitments made by the country for the nutrition and food summits in 2021, Yemen wasting reduction and nutrition information system action plans all in line with the strategy as well as the subsequent action plans of this strategy developed and endorsed and linked to the overarching multisectoral nutrition action plan from MoPIC. Community engagement can support tracking actions at local level.

There is also a need of strengthening the monitoring, supervision, and evaluation of nutrition fund through tracking the effectiveness of budget utilization. Effective use of the fund will be based on avoiding duplication, being cost effective and implementing high impact intervention. The National Health Account exercise can include a nutrition module to provide such information on fund sources and utilization. The results will be tracked, analyzed, and consolidated into usable insights information to drive better action through decision-making across sectors. This is an advocacy tool for an equitable distribution of fund and activities implementation based on the identified priorities. In addition, the level of community

engagement in decision making for problem identification and solving and activities implementation, the quality of the care, the coverage will be assessed.

Data Utilization and Knowledge building

Under the coordination of the SUN-Yemen and the MOPH, the creation of an exchange platform will enable to constantly disseminate and use the information by sharing with all stakeholders including civil society, international and national partners who play a key role in nutrition interventions in Yemen. Discussion holds around best practice, success stories and lessons learned as well as encouraging stakeholders to improve their activities into more scalable and impactful actions will enable an acceleration of progress toward the agreed targets. Exchange with other country in a South to South or South North cooperation will provide broader experience and better practice.

V. Equality in access to nutrition interventions, Guiding principles and Enablers

Regardless of their gender and social situation, all people living in Yemen will have equal access to nutrition service delivery and will be treated based on their needs of medical and nutrition care including internal displaced population, and refugees with tailored care for boys, girls, women, and men. Programs related to reproductive and maternal health will be mainstreamed in all the relevant strategic areas of action. Yemeni women and youth through school and community platforms will have an active participation to support and promote care availability expansion, and sustainability in the community and in the household involving this way all the family members in nutrition actions.

In addition to the core values, the guiding principles will be to increase population resilience during food and nutrition crisis leaving no one behind with a focus on hard to reach and vulnerable populations. Accent will be put on intervention with sound impact in humanitarian or development context.

The institutional and structural changes for a strong national multisectoral collaboration and coordination as well as an implementation focusing of nutrition specific and sensitive interventions harnessing humanitarian to development will improve nutrition actions in all relevant sectors. The peace process and a sustained political and financial commitment as well as dedicated national senior experts and managers in concerned ministries and parliamentarians

to update food and nutrition laws and facilitate their application and enforcement by relevant institutions, are enablers for the implementation of the nutrition strategy, in addition to national and international partner's support. Community knowledge improvement and empowerment for their strong engagement through social leaders, women, and youth in assessing the situation, finding fit to context sounds solutions and taking actions to address their nutritional problems help to hear their concern, enhance their resilience, and sustain the change in their behavior for good nutrition.

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